

left in the page for more advanced handheld devices capable of receiving and displaying the images.

[0050] For the edit server, a web manager who does not want a certain web page or a web site to be compressed simply uses a standard meta tag specification to inform the server not to process selected pages from the web site or even the entire content from that web site.

[0051] FIG. 8 illustrates an exemplary method in flow-chart form for the HTML edit server of a preferred embodiment of the present invention. The editing process is performed in conjunction with the Compressor 418, 618 and the Control Server 642 or the Redirector 416. The process flows from a "wait state" 802 to processing once a request is received. When a request is received, the HTML Editor checks the submitted page's HTML code for tags, 804 which designate objects, such as GIF, JPEG and PNG, that can be compressed and replaced with compressed content tags. If the tag is found to be an image tag at 806 then the Compressor is notified that an image needs compression 820. If the compression was unsuccessful the tag is skipped 824 and the Editor resumes the process of finding and examining new tags for compression 804. If the compression was successful the image tag is edited 830, the end of the file is reached 836, statistics are written 838, the file is saved 840, the logs are updated 842 and the Editor goes back into the wait state 802.

[0052] If the tag is found to be an Anchor Tag or a Thumbnail 808 then the editor notifies the Compressor that an image needs compression 810. If the compression is unsuccessful the tag is skipped 814 and the editor resumes the process of finding and examining new tags for compression 804. If the compression was successful the Anchor tag is edited, the end of the file is reached 836, statistics are written 838, the file is saved 840, the logs are updated 842 and the Editor goes back into the wait state 802.

[0053] On the other hand if the tag is a HREF that points to an image 816, the image is downloaded 818 and the Compressor is notified that an image needs compression 820. If the compression was unsuccessful the tag is skipped 824 and the Editor resumes the process of finding and examining new tags for compression 804. If the compression of the image tag was successful, the end of the file is reached, statistics are written 838, the file is saved 840, the logs are updated 842 and the Editor goes back into the wait state 802.

[0054] At step 828, the Editor checks for an image map. If an image map is found then the Editor gets the image map data 832. If the compression is successful the Image Map is edited 830, the end of the file is reached 836, statistics are written 838, the file is saved 840, the logs are updated 842 and the Editor goes back into the wait state 802. If an image map is not found the image tag, if any, is edited 830 the end of the file is reached 836, statistics are written 838, the file is saved 840, the logs are updated 842 and the Editor goes back into the wait state 802.

[0055] FIG. 9 illustrates an exemplary method in flow-chart form for the compression server according to an embodiment of the invention. Compression is preformed by the Compressor 418, 618 and the HTML editor. Initially the Compressor is in a wait state until it gets a request from the HTML Editor 901. Upon receiving a request to compress an

image, the Compressor first determines the media type 902 of the material to be compressed (JPEG and GIF files are examples of media types that can be compressed). The decision block next determines whether or not the media type must first be decompressed 903. Certain types of media such as JPEG and GIF must be decompressed before the Compressor can compress them. If there are images that need to be decompressed then decompression parameters are set 904 and the image is decompressed 905. In the case of JPEG and GIF the decompressed image becomes a BMP (bitmap). The Compressor checks to see if the decompression was successful 906. If the decompression was successful then the Compressor sets the compression parameters 907 and compresses the object 908. A return code is generated 909 and the compression is checked to see if such compression was more than predetermined threshold (e.g., 10%) 910. If the compression was more than the threshold, a reply message is sent to the Editor stating that the compression was successful 913. The logs are then updated 914, ending compression for this object. If the compression was less than threshold the quality is checked and a determination is made as to whether or not the quality is greater than another predetermined threshold (e.g., >20) 911. If the quality is >20 it is lowered by a predetermined amount (e.g., 5), 912 and the object is recompressed 908. If the quality is less than the threshold (<20), a reply message is sent to the Editor that the compression is complete. The logs are updated 914, thus ending the compression for this object. In the instance that the decompression is not successful 906, a reply message is sent to the Editor stating that the decompression was unsuccessful 913. The logs are updated 914, thereby ending compression for this object. FIG. 10 illustrates a flowchart of n-Depth Compression 1000 according to an embodiment of the invention. The n-Depth Compressor, working in concert with the Control Server 632 and the HTML Editor 423, parses out links from requested URLs and sends the resulting pages to the HTML Editor. The depth of such parsing is configurable at startup. The following description of FIG. 10 illustrates the n-Depth Compression processes. The n-depth Compressor begins in a wait state 1001 until it receives a request from the Control Server or Redirector to examine a URL for links. Upon receiving a request to examine a URL, the n-Depth Compressor locates the first link on the page 1002 and a decision block 1003 determines if the link points to a page coded with HTML. The HTML encoded page is downloaded 1004. The depths of the associated links are calculated and the depth object is updated 1005. The HTML is then parsed 1006 and all images are downloaded =using a separate thread 1006 and the Editor and Cache Manage are notified 1007. Next, the Editor is notified that it needs to edit the page and then checks with the cache manager to see if it already has the page. A decision block 1008 determines whether are not the end of the page has been reached. If the end of the page has been reached, depth is recalculated and the depth object (data structure that tells the n-Depth Compressor how deep it is) is updated 1009. If the end of the page has not been reached the routine begins again 1002 with the next link. After reaching the end of the page 1008 and recalculating depth and updating the depth object 1009, a decision block 1010 determines whether or not n-Depth has been reached. If n-Depth has been reached the log files 1011 are updated and the n-Depth Compressor returns to wait 1001. In the